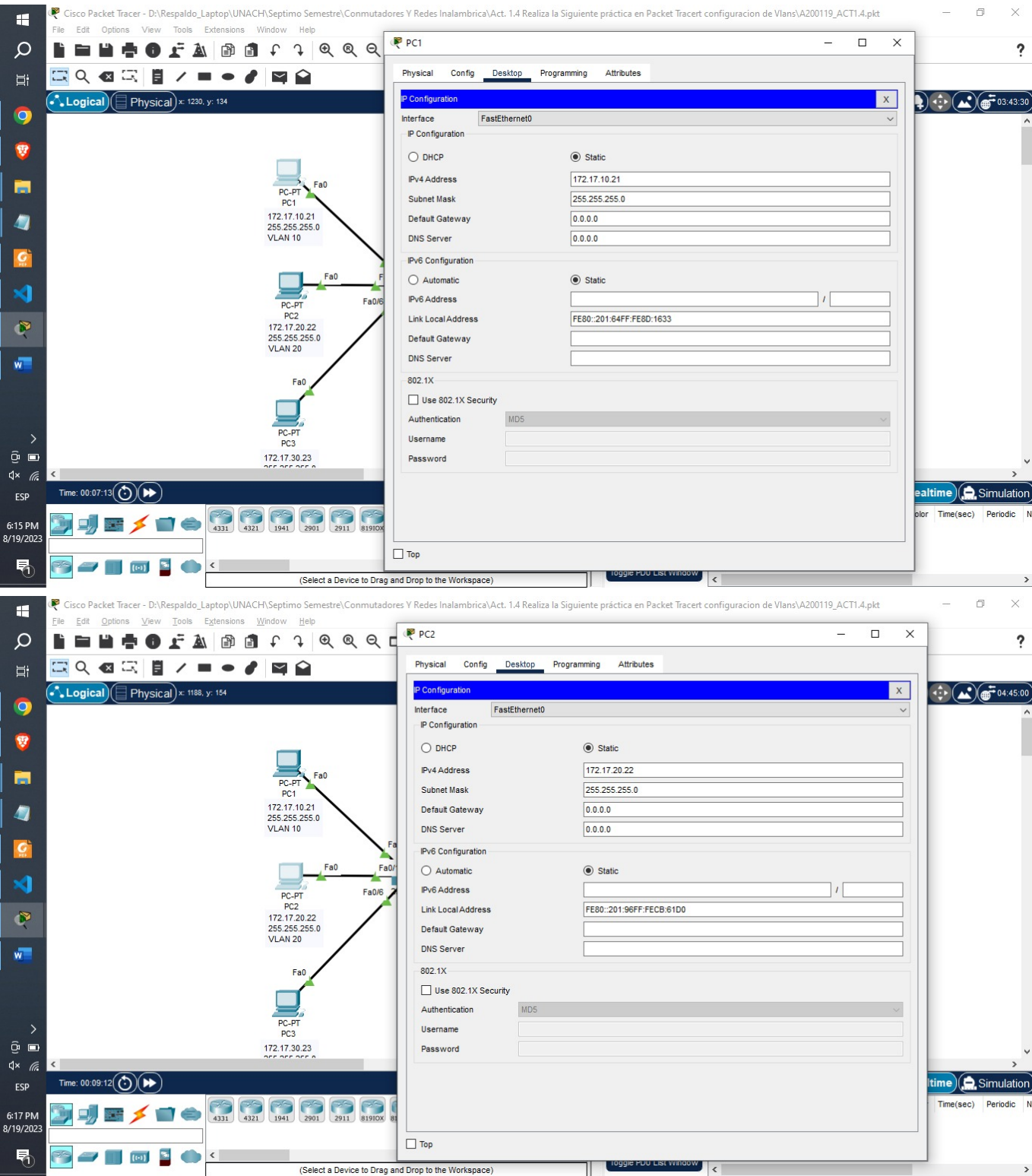


Programación de la red

1. Asignación de IPs



File Edit Options View Tools Extensions Window Help

Logical Physical x: 1250, y: 59

PC-PT PC1
172.17.10.21
255.255.255.0
VLAN 10

PC-PT PC2
172.17.20.22
255.255.255.0
VLAN 20

PC-PT PC3
172.17.30.23
255.255.255.0
VLAN 30

1. Assign

2. Config

Time: 00:10:29

4331 4321 1941 2901 2911 81910X 81910W

6:18 PM 8/19/2023

PC3

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☒ Static

☐ DHCP

IPv4 Address 172.17.30.23

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☒ Static

☐ Automatic

IPv6 Address

Link Local Address FE80::202:17FF:FEA6:667A

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MDS

Username

Password

Top

(Select a Device to Drag and Drop to the Workspace)

PC4

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☒ Static

☐ DHCP

IPv4 Address 172.17.10.24

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☒ Static

☐ Automatic

IPv6 Address

Link Local Address FE80::202:16FF:FEA6:2298

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MDS

Username

Password

Top

(Select a Device to Drag and Drop to the Workspace)

Root

PC-PT PC4
172.17.10.24
255.255.255.0
VLAN 10

PC-PT PC5
172.17.20.25
255.255.255.0
VLAN 20

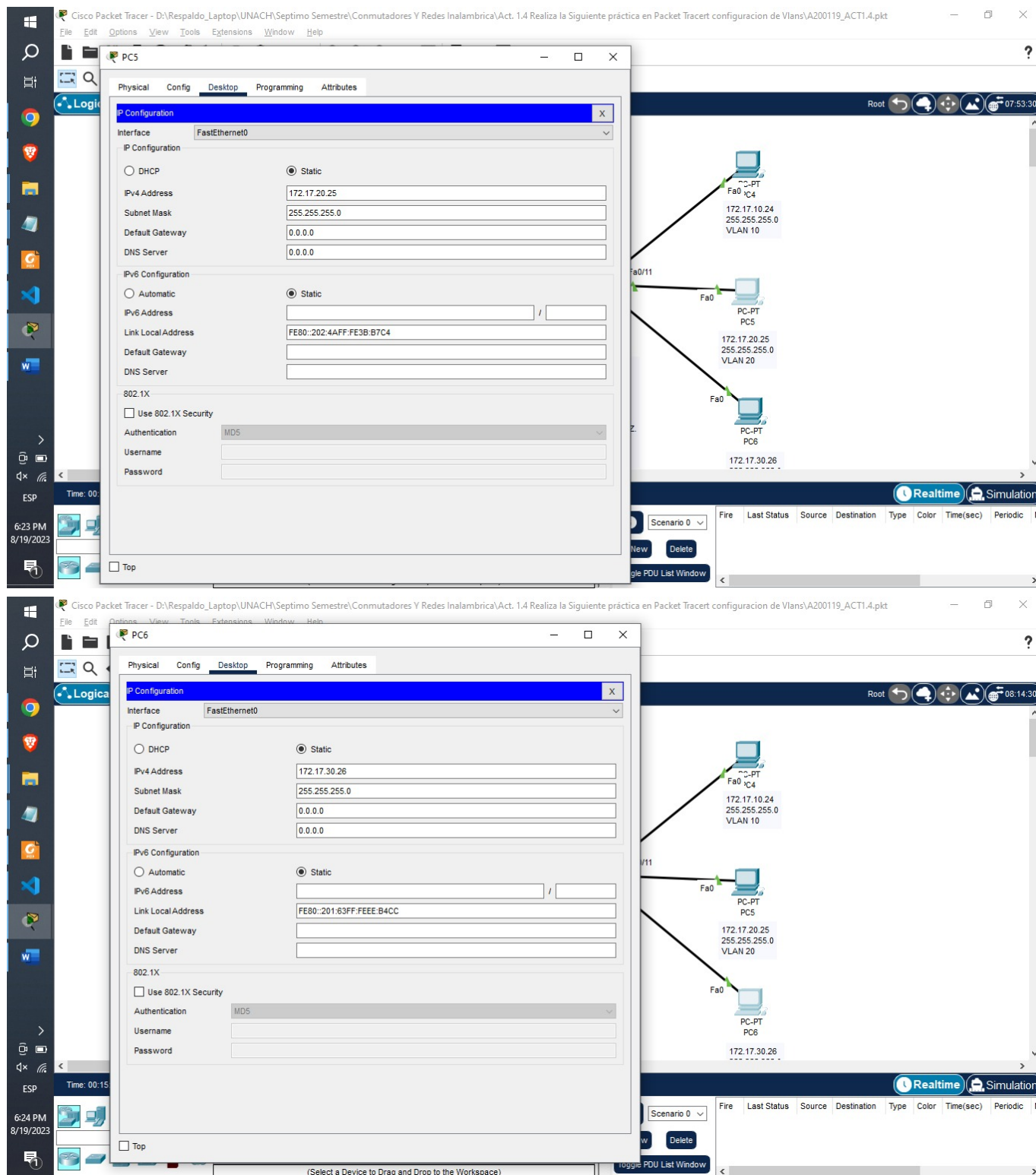
PC-PT PC6
172.17.30.26
255.255.255.0
VLAN 30

Time: 00:10:29

Scenario 0

Fire Last Status Source Destination Type Color Time(sec) Periodic N

6:19 PM 8/19/2023



2. Asignación del nombres

```
Switch>ena
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S1
S1(config)#vlan 10
Switch(config-vlan)#name vlan10
S1(config-vlan)#exit
S1(config)#vlan 20
```

```
S1(config-vlan)#name vlan20
S1(config-vlan)#exit
S1(config)#vlan 30
S1(config-vlan)#name vlan30
S1(config-vlan)#exit
S1(config)#

Switch>ena
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S2
S2(config)#vlan 10
S2(config-vlan)#name vlan10
S2(config-vlan)#exit
S2(config)#vlan 20
S2(config-vlan)#name vlan20
S2(config-vlan)#exit
S2(config)#vlan 30
S2(config-vlan)#name vlan30
S2(config-vlan)#exit
S2(config)#

Switch>ena
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname S3
S3(config)#vlan 10
S3(config-vlan)#name vlan10
S3(config-vlan)#exit
S3(config)#vlan 20
S3(config-vlan)#name vlan20
S3(config-vlan)#exit
S3(config)#vlan 30
S3(config-vlan)#name vlan30
S3(config-vlan)#exit
S3(config)#
```

3. Asignación de puertos

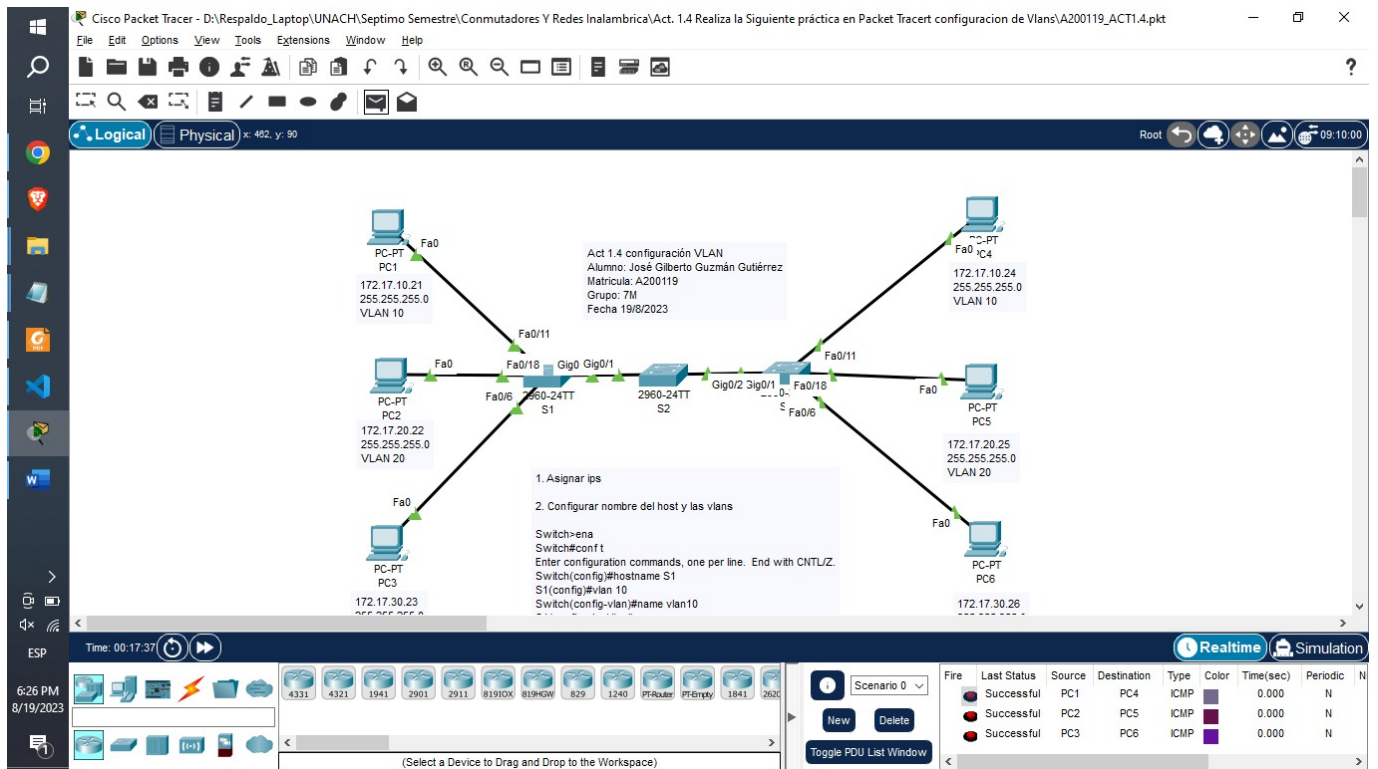
```
S1>ena
S1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#inter f0/11
S1(config-if)#switchport mode access
S1(config-if)#switchport access vlan 10
S1(config-if)#exit
S1(config)#inter f0/18
S1(config-if)#switchport mode access
S1(config-if)#switchport access vlan 20
```

```
S1(config-if)#exit
S1(config)#inter f0/6
S1(config-if)#switchport mode access
S1(config-if)#switchport access vlan 30
S1(config-if)#exit
S1(config)#
S1(config)#inter g 0/1
S1(config-if)#switchport mode trunk

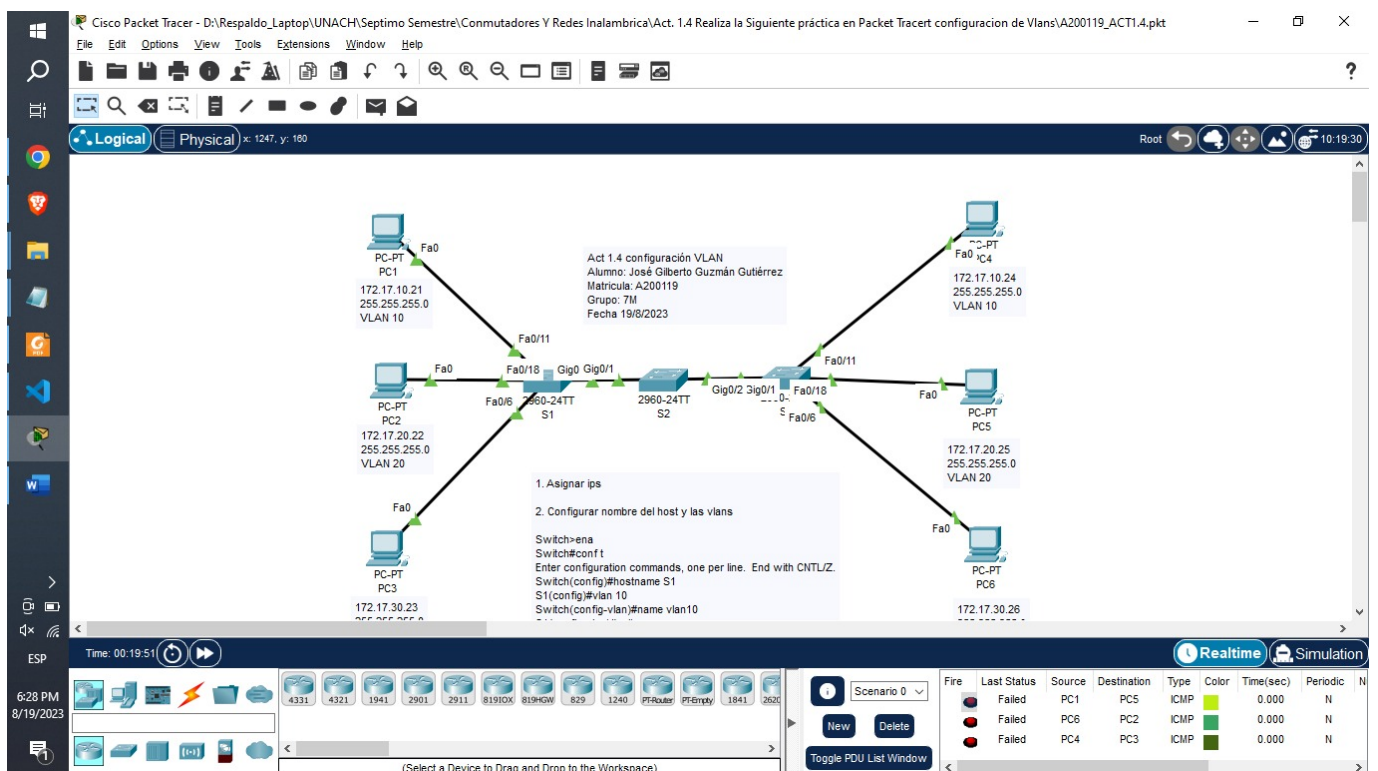
S2>ena
S2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#inter range gig0/1-2
S2(config-if-range)#switchport mode trunk
S2(config-if-range)#exit
S2(config)#

S3>ena
S3#conf t
Enter configuration commands, one per line. End with CNTL/Z.
S3(config)#inter f0/11
S3(config-if)#switchport mode access
S3(config-if)#switchport access vlan 10
S3(config-if)#exit
S3(config)#inter f0/18
S3(config-if)#switchport mode access
S3(config-if)#switchport access vlan 20
S3(config-if)#exit
S3(config)#inter f0/6
S3(config-if)#switchport mode access
S3(config-if)#switchport access vlan 30
S3(config-if)#exit
S3(config)#
S3(config)#inter g0/1
S3(config-if)#switchport mode trunk
```

Comprobación de resultados



Se **permite la comunicación** entre los equipos que forman parte de la misma vlan.



Se **restringe la comunicación** entre los equipos que no forman parte de la misma vlan.